

## Claims

1. A method for transmitting data with a defined number of bits via a physical channel in a communication system, said channel  
5 being used by at least one first transceiver and one second transceiver,
  - wherein the data to be transmitted (TD) is composed of load data (LD) and identification data (ID) for identifying the second communication device,
  - 10 - wherein the load data (LD) and the identification data (ID) are coded separately from each other using convolutional coding in each case,
  - and the respective convolutional coding (C\_LD, C\_ID) takes place in such a way that the same number of bits is produced  
15 after the coding operation for the load data LD and the identification data ID,
  - wherein the coded load data (LD) and the coded identification data (ID) are linked with each other by means of an XOR linking operation,
  - 20 - the rate of the linked data is matched to the number of bits defined for the physical channel using a rate matching pattern immediately before or immediately after the XOR linking operation, with the rate matching pattern defining which bits in a data stream are punctured or repeated,
  - 25 - wherein the rate matching pattern for the load data (LD) and the identification data (ID) is identical.

2. The method according to claim 1, wherein the coding operation supplies a bit sequence of bits 1 to n in a defined time window by means of which the rate is defined,
  - and rate matching is performed by means of a rate matching pattern by which individual bits in said sequence are punctured.
3. The method according to one of the preceding claims, wherein the physical channel is the High Speed Shared Control Channel (HS-SCCH).
4. The method according to one of the preceding claims, wherein the identification data is the identification number of a transceiver.
5. The method according to claim 3 and 4, wherein the rate matching takes place using a rate matching pattern by which the bits at positions 1, 2, 4, 8, 42, 45, 47, 48 are punctured in the bit sequence consisting of  $n = 48$  bits.
6. The method according to claim 3 and 4, wherein the bits at positions 1, 7, 13, 19, 25, 31, 37, 43 are punctured in the bit sequence consisting of  $n = 48$  bits.
7. The method according to claim 6, wherein the position of the bits being punctured is shifted by a whole number  $k$ , where  $0 < k \leq 5$ .
8. The method according to one of the preceding claims, wherein linking is bit-by-bit linking.